# EXHIBIT A

# AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS

# NOTICE OF PROPOSED RULEMAKING ACTION

#### REGARDING

# TITLE 14. NATURAL RESOURCES DIVISION 2. DEPARTMENT OF CONSERVATION CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES SUBCHAPTER 2. ENVIRONMENTAL PROTECTION

Notice Published May 29, 2015

**NOTICE IS HEREBY GIVEN** that the California Department of Conservation (Department) proposes to adopt the regulations described below after consideration of all comments, objections, and recommendations regarding the proposed action. With this rulemaking, the Department will propose permanent regulations, after the consideration of all comments, objections, and recommendations.

# WRITTEN COMMENT PERIOD AND PUBLIC COMMENT HEARINGS

Any person, or his or her authorized representative, may submit written statements, arguments, or comments relevant to the proposed regulatory action to the Department. Comments may be submitted by email to <a href="mailto:UIC.Regulations@conservation.ca.gov">UIC.Regulations@conservation.ca.gov</a>, by facsimile (FAX) to (916) 324-0948, or by mail to:

Department of Conservation 801 K Street, MS 24-02 Sacramento, CA 95814

ATTN: Aquifer Exemption Compliance Schedule Regulations

The written comment period closes at 5:00 p.m. on July 13, 2015. The Department will consider only comments received at the Department's offices by that time.

Any interested person, or their authorized representative, may present, either orally or in writing, comments regarding the proposed action at one of the public hearings, to be held at the following times and places:

- Bakersfield July 15, 4:00pm 7:00pm. Bakersfield Marriott at the Convention Center, 801 Truxtun Avenue.
- Santa Maria July 16, 4:00pm 7:00pm. Santa Barbara County Supervisors Hearing Room, 511 East Lakeside Pkwy.

Services, such as translation between English and other languages, may be provided upon request. To ensure availability of these services, please make your request no later than ten working days prior to the hearing by calling the staff person referenced in this notice.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 1 of 10 Servicios, como traducción de Inglés a otros idiomas, pueden hacerse disponibles si usted los pide en avance. Para asegurar la disponibilidad de éstos servicios, por favor haga su petición al minimo de diez días laborables antes de la reunion, llamando a la persona del personal mencionada en este aviso.

# **AUTHORITY AND REFERENCE**

The Department is considering making changes to Subchapter 2 of Chapter 4 of Division 2 of Title 14 of the California Code of Regulations as follows: adoption of sections 1760.1 and 1779.1.

Public Resources Code section 3013 authorizes the Department to adopt the proposed regulations. The proposed regulations will implement, interpret, make specific, or reference sections 3106, 3220, 3222 and 3236.5 of the Public Resources Code, and 40 Code of Federal Regulations parts 144.3 and 144.7 (2015).

# **INFORMATIVE DIGEST / POLICY STATEMENT**

#### **Existing Law**

California Regulation of Underground Injection Wells Associated With Oil and Gas Production

The Division of Oil, Gas, and Geothermal Resources (Division), within the Department of Conservation, supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells. The Division carries out its regulatory authority to encourage the wise development of oil and gas resources, while preventing damage to life, health, property, and natural resources, including underground and surface waters suitable for domestic or irrigation purposes. (See Pub. Resources Code, § 3106.) Among the wells the Division regulates are injection wells that inject fluids or gas for the purpose of enhancing oil or gas recovery or repressuring oil or gas reservoirs, and injection wells that dispose wastewater and other byproducts associated with oil and gas production. Written approval from the Division is required before any subsurface injection associated with oil or gas production can begin. (Cal. Code Regs., title 14, §§ 1714, 1724.6.) The Division's regulations at Title 14, Division 2, Chapter 4 of the California Code of Regulations contain specific requirements that an applicant must satisfy before the Division will approve a subsurface injection project.

Public Resources Code section 3236.5 provides that any person who violates the State oil and gas laws is subject to a civil penalty of up to \$25,000 for each violation. When establishing the amount of the penalty, the Division considers, in addition to other relevant circumstances, (1) the extent of harm caused by the violation; (2) the persistence of the violation; (3) the pervasiveness of the violation; and (4) the number of prior violations by the same violator.

<u>California Primacy to Enforce an Underground Injection Control Program Pursuant to the Federal Safe</u>
<u>Drinking Water Act</u>

Enacted in 1974, the federal Safe Drinking Water Act directed the United States Environmental Protection Agency (US EPA) to develop federal standards for the protection of the nation's public drinking water supply. Section 1425 of the Safe Drinking Water Act provides a mechanism by which

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 2 of 10 states can obtain primary enforcement responsibility (often referred to as "primacy") for regulating the underground injection of fluids associated with oil and gas production through their own state underground injection control (UIC) programs. To obtain primacy under section 1425 of the Safe Drinking Water Act, a state must demonstrate to US EPA's satisfaction that its UIC program meets certain minimum requirements set forth in the Safe Drinking Water Act and represents an effective program to prevent injection which endangers underground sources of drinking water. (See 42 U.S.C., § 300h–4(a).)

Once US EPA approves a state UIC program, the state has primary responsibility for regulating underground injection within its jurisdiction. In such cases, the state and US EPA enter into a Memorandum of Agreement (Primacy Agreement), which may include other terms, conditions, or agreements relevant to the administration and enforcement of the state's regulatory program. (See 40 C.F.R. § 145.25(a).) In primacy states, US EPA retains oversight and secondary enforcement authority, as well as the authority to revise or withdraw state primacy. (See 42 U.S.C. § 300h–2(a) [US EPA may enforce the Safe Drinking Water Act when the state fails to take appropriate action]; see also 40 C.F.R. § 145.33 [identifying grounds for US EPA to withdraw primacy approval of a state program].) One of the grounds for US EPA to withdraw primacy approval of a state program is when the state program fails to comply with the terms of the Primacy Agreement and the state fails to take corrective action satisfactory to US EPA. (40 C.F.R. § 145.33.)

In 1981, California applied, through the Division, pursuant to section 1425 of the Safe Drinking Water Act, for primacy to implement a Class II UIC program. (*See* Application for Primacy in the Regulation of Class II Injection Wells under section 1425 of the Safe Drinking Water Act<sup>1</sup>). "Class II" is the classification US EPA's regulations give to wells that inject fluid associated with oil and gas production. US EPA granted primacy to the Division through a Memorandum of Agreement between US EPA and the Division, dated September 29, 1982. The Primacy Agreement defines the terms of the Division's UIC program, as understood and approved by US EPA.

# Underground Sources of Drinking Water and Aquifer Exemptions

Among the Safe Drinking Water Act's minimum requirements for the Division's UIC program is a requirement that the Division protect underground sources of drinking water. Underground sources of drinking water (or "USDW") are defined in federal regulation as including any aquifer that contains a sufficient quantity of groundwater to supply a public water system and that has a total dissolved solids (TDS) content of less than 10,000 milligrams per liter (mg/L). (See 40 C.F.R. § 144.3.) The Division's Primacy Agreement with US EPA provides that the Division will not authorize injection into USDW.

An aquifer or its portion that would otherwise qualify as an USDW may be exempted from protection, however, if it meets specific exemption criteria enumerated in federal regulations and undergoes an exemption process that involves both the Division and US EPA. (See 40 C.F.R., §§ 146.4, 144.7.) In states that implement their own UIC programs, such as California, exempted aquifers may be designated by

http://www.conservation.ca.gov/dog/general\_information/Documents/Application%20for%20Primacy.pdf

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 3 of 10

<sup>&</sup>lt;sup>1</sup> Available at

the state and submitted to US EPA for review. No aquifer exemption is valid unless and until it is approved by US EPA. (See 40 C.F.R. § 144.7.)

In some cases, industry participants who need an aquifer exemption in order to conduct injection activities may provide the Division information showing the aquifer meets the exemption criteria. If the Division finds the aquifer meets the exemption criteria, the Division will then give public notice and provide opportunity for public comment before submitting the designation to US EPA for review and possible approval.

# Background

The objective of these proposed regulations is to implement corrective action necessary to bring California's Class II UIC program into compliance with the federal Safe Drinking Water Act. The proposed action is intended to prevent risk of harm to groundwater suitable for municipal or irrigation purposes, and is also thereby implementing the Division's statutory mandate to prevent, as far as possible, damage to life, health, property and natural resources. Using rulemaking action to achieve these goals will promote transparency and consistency, which is necessary to address public concern and to prevent unnecessary disruption of operations.

# US EPA Audit and Identification of Deficiencies in California's Class II UIC Program

Beginning in or about April 2010, the US EPA audited the State's Class II UIC program and subsequently concluded that the Division's implementation of the State program was falling short of the Safe Drinking Water Act's minimum requirements. In the course of its ongoing corrective review, the Division determined that it has in the past permitted injection wells into aquifers (or portions of aquifers)<sup>2</sup> that qualify as USDW under the Safe Drinking Water Act and yet have not been exempted pursuant to the aquifer exemption process. In addition, US EPA has determined that eleven aquifers historically treated as exempt by US EPA and the Division may not actually be exempt, and that the State and US EPA must reevaluate these aquifers to determine whether they are appropriate for ongoing injection.

# 1. Injection into Non-Exempt Aquifers

The Division's allowance of injection wells in non-exempt USDW conflicts with the terms of the Division's Primacy Agreement with US EPA, which defines the parameters of the State's federally-approved UIC program. The Primacy Agreement mandates that the Division will not authorize injection into aquifers that contain less than 10,000 mg/L TDS unless the aquifer meets the criteria for an aquifer exemption and an exemption has been designated by the Division and approved by US EPA. (See Primacy Agreement at pp. 6-7.) The Division has identified over 2,500 wells in California (including both enhanced oil recovery injection wells and disposal injection wells) that may have been improperly approved for injection into non-exempt aquifers containing water with less than 10,000 mg/L TDS.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 4 of 10

<sup>&</sup>lt;sup>2</sup> In some cases, injection is occurring into non-exempt portions of exempted aquifers (at depth or lateral locations outside the scope of the existing exemption). References herein to non-exempted aquifers or aquifers that require an aquifer exemption for purposes of injection authorization may include such portions of aquifers not covered by the scope of an existing exemption.

These aquifers are subject to protection as USDW unless and until they are covered by an aquifer exemption.

# 2. <u>Uncertain Exemption Status of Eleven Aquifers Historically Treated as Exempt</u>

In 1981, the Division proposed aquifer exemptions for various hydrocarbon-producing aquifers and certain non-hydrocarbon-producing aquifers that were being used for the injection of oil or gas field waste at the time of the primacy application. (See Primacy Application at Appendix B.) The Primacy Agreement between the State and US EPA identifies those aquifers for which US EPA confirmed exemptions. Unfortunately, however, there exist two competing versions of the Primacy Agreement, each with the same signature page and dates, which differ with respect to the non-hydrocarbon-producing aquifers US EPA agreed to exempt. One version purports to deny exemptions for eleven non-hydrocarbon-producing aquifers, while the second version purports to approve exemptions for those same aquifers. Many or all of the eleven affected aquifers appear to contain non-hydrocarbon-producing waters with less than 3,000 mg/L TDS, raising additional questions about whether these aquifers are or were ever eligible for an exemption. Nevertheless, the Division and US EPA have historically (up until about 2012) treated these eleven aquifers as exempt (hereinafter the "Eleven Aquifers Historically Treated as Exempt"), and the Division has approved injection wells into these aquifers.

# Corrective Actions to Bring the State UIC Program into Compliance with the Safe Drinking Water Act

On March 9, 2015, extensive discussions between US EPA, the Division, and the State Water Resources Control Board (SWRCB) culminated in a detailed corrective action plan, explicitly deemed necessary by US EPA, to bring the State's Class II UIC program into compliance with the Safe Drinking Water Act. The corrective action plan calls for the Division to phase out all injection into non-exempt aquifers by October 15, 2015 (for wells injecting into non-hydrocarbon-producing zones under 3,000 mg/L TDS) and February 15, 2017 (for all remaining Class II injection wells). The plan also requires that the Division prohibit by December 31, 2016 injection into the Eleven Aquifers Historically Treated as Exempt absent a US EPA decision that the aquifer(s) meet the regulatory criteria for an aquifer exemption. US EPA's command that the Division take these corrective actions is significant in part because US EPA may withdraw a state's primacy authorization under the Safe Drinking Water Act if the state fails to comply with the terms of its Primacy Agreement and fails to take corrective action satisfactory to US EPA. (See 40 C.F.R. § 145.33.)

# **Objectives and Benefits of the Proposed Regulations**

The proposed regulations would phase out injection into non-exempt USDWs according to the compliance deadlines directed by US EPA. The regulations would also clarify that codification of these compliance deadlines does not create an entitlement to injection approval, they would define relevant terms, and they would identify the civil penalty for unlawful injection that occurs beyond the compliance deadlines. The objectives, benefits and policy rationale of the proposed regulations include the following:

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 5 of 10

- Implement Corrective Actions Deemed Necessary by US EPA. The proposed regulations would carry out the corrective actions deemed necessary by US EPA; phasing out injection into non-exempt aquifers and the Eleven Aquifers Historically Treated as Exempt (absent US EPA affirmation of an aquifer exemption) by specified compliance dates that US EPA sanctioned after extensive interagency discussions. US EPA has made clear that the Division's failure to phase out injection in the specified aquifers by the stipulated compliance deadlines (absent the approval of aquifer exemptions) would seriously jeopardize the State's ability to maintain primacy over Class II injection in California. Losing primacy would be an unfavorable result in part because it would diminish the State's regulatory role and authority over important resource management decisions affecting groundwater resources and oil and gas production.
- Implement the Division's Mandate under Public Resources Code Section 3106. Public Resources Code section 3106 requires the Division to encourage the wise development of oil and gas resources, while preventing damage to life, health, property, and natural resources, including underground and surface waters suitable for domestic or irrigation purposes. The proposed regulations would implement the Division's section 3106 mandate by phasing out injection into non-exempt aquifers according to a schedule that prioritizes action on the aquifers that are most likely to contain water suitable for domestic or irrigation purposes.
- <u>Codify a Key Component of the Primacy Agreement</u>. The proposed regulations would codify the requirement in the Primacy Agreement that an aquifer exemption must be in effect prior to or concurrent with the Division's approval of injection wells into any aquifer that meets US EPA's definition of an USDW. This would give unambiguous regulatory effect to an important aspect of the State's Class II UIC program that is currently only explicit in the Primacy Agreement.
- Resolve Uncertainty Over Status of the Eleven Aquifers Historically Treated as Exempt. The proposed regulations would identify the State's and US EPA's resolution of the historical and geologic/factual uncertainty regarding the Eleven Aquifers Historically Treated as Exempt. The proposed regulations would effectively cease injection into these aquifers by the end of 2016 unless US EPA affirms the existence of the aquifer exemption(s).
- <u>Clarify the Civil Penalty for Unlawful Injection</u>. The proposed regulations would establish a minimum civil penalty of \$20,000 for each well for each day injection occurs in non-exempt USDW aquifers beyond the compliance deadlines. The provision would also preserve the Division's discretion to impose a greater civil penalty, not to exceed \$25,000 per day for each well, based on the statutory factors set forth in Public Resources Code section 3236.5 (the extent of harm, persistence, pervasiveness, and prior occurrences of the violation).
- <u>Provide Transparency and Consistency</u>. The proposed regulations will ensure that the regulated industry and the general public are aware of the State's plan for addressing this issue and that compliance is achieved in a consistent and predictable manner.

# **CONSISTENCY WITH FEDERAL REGULATION OR STATUTE**

The proposed regulations are the product of extensive consultation between US EPA, the Department, and the SWRCB. One of the primary objectives of the proposed regulations is to bring the State's Class II UIC program into compliance with the federal Safe Drinking Water Act by implementing specific

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 6 of 10 corrective actions identified and deemed necessary by US EPA. The proposed regulations do not differ substantially from existing federal law; rather, they are intended to harmonize state and federal requirements.

# **CONSISTENCY WITH EXSITING STATE REGULATIONS**

The proposed regulations are not inconsistent or incompatible with existing state regulations. US EPA granted primacy to the Division and the Division is the only state agency with regulations specific to Class II injection operations in the state. The proposed regulations establish deadlines for compliance with federal requirements, but the proposed regulations are not an entitlement to inject up to those deadlines. Because the Division retains discretion in permitting and regulating underground injection projects in the subject aquifers, the proposed regulations would not be inconsistent or incompatible with any existing state regulations that might otherwise limit or halt Class II injection.

# PLAIN ENGLISH REQUIREMENT

The Department staff prepared the proposed regulations pursuant to the standard of clarity provided in Government Code section 11349 and the plain English requirements of Government Code sections 11342.580 and 11346.2, subdivision (a)(1). The proposed regulations are written so as to be easily understood by the persons that will use them.

#### **LOCAL MANDATE**

This proposed action does not impose a mandate on local agencies or school districts.

# **COST OR SAVINGS TO STATE AGENCIES**

<u>Costs or Savings to State Agencies</u>: The Department does not anticipate any added costs to the Department or other State agencies as a result of the proposed action. The Department estimates that the proposed action may result in minor, unquantifiable savings to the Department and potentially the SWRCB and/or Regional Water Quality Control Boards because rulemaking is anticipated to be a more efficient mechanism for obtaining compliance than individual enforcement orders issued to each affected operator.

Non-Discretionary Costs or Savings to Local Agencies, Including Costs to any Local Agency or School District Requiring Reimbursement Pursuant to Section 17500 et seq.: None. The proposed action will not result in any costs or savings to local agencies.

<u>Cost or Savings in Federal Funding to the State</u>: The proposed action does not directly affect federal funding to the State. However, the State's failure to bring its UIC Program into compliance with the federal Safe Drinking Water Act as directed by US EPA could result in a loss of federal funding to the State. The proposed action would eliminate that risk for loss of federal funding by ensuring that the State UIC Program meets US EPA's call for corrective action to achieve compliance with the federal Safe Drinking Water Act.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 7 of 10

# **DECLARATION REGARDING DETERMINATION OF ANTICIPATED BUSINESS IMPACT**

The Department has made an initial determination that the proposed action will not have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. This determination is based upon and supported by the facts, evidence, and analysis presented in the Initial Statement of Reasons and the Economic Impact Assessment/Analysis that are part of the rulemaking record for the proposed regulations. For the same reasons, the Department has determined that the proposed regulations will not affect small businesses.

# COST IMPACTS ON A REPRESENTATIVE PRIVATE PERSON OR BUSINESS

The Department anticipates that a typical operator of one or more injection wells affected by the proposed regulations would not experience any significant costs directly attributable to the proposed regulations.

The proposed regulations would establish an enforceable schedule by which all operators statewide must, in compliance with existing requirements, cease injection into non-exempt USDW aquifers. However, in the absence of the proposed regulations, the Department would still secure compliance with the existing requirements according to the same timeframes and criteria outlined in the proposed regulations, but would likely proceed by issuing individual orders to operators rather than by an enforceable regulatory schedule. The difference between these two scenarios likely would not result in any significantly changed costs of compliance for a typical operator.

Accordingly, the Department is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

# RESULTS OF THE ECONOMIC IMPACT ASSESSMENT/ANALYSIS

Based upon its analysis, the Department has determined:

- The proposed regulations will not affect the creation or elimination of jobs within California.
- The proposed regulations will not affect the creation of new businesses or the elimination of existing businesses within California.
- The proposed regulations will not affect the expansion of businesses currently doing business within California.
- The proposed regulations may, to a small but unknown degree, affect the *timing* of potential negative impacts on California business and jobs. However, the potential impacts themselves arise from existing requirements and not the proposed regulations.
- The proposed regulations will benefit the welfare of California residents by providing improved transparency to the Department's regulatory supervision over a subject of profound public concern. The proposed regulations would also likely provide a benefit to the environment by streamlining the enforcement process, thereby hastening preservation of the quality of nonexempt USDW aquifers.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 8 of 10

#### **HOUSING COSTS**

The proposed action will not have a significant effect on housing costs.

#### CONSIDERATION OF ALTERNATIVES

In accordance with Government Code section 11346.5, subdivision (a)(13), the Department must determine that no reasonable alternative it considered, or that was otherwise identified and brought to the Department's attention, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost effective to affected persons and equally effective in implementing the statutory policy or other provision of law.

The Department invites interested persons to submit comments regarding alternatives to the proposed regulations during the written comment period, or to present any such comments regarding alternatives, either orally or in writing, at the hearing scheduled to receive comments relevant to the proposed action.

# **CONTACT PERSONS/AVAILABILITY OF DOCUMENTS**

Inquiries concerning the proposed action may be directed to:

Tim Shular
Department of Conservation
801 K Street, MS 24-02
Sacramento, CA 95814

Phone: (916) 322-3080

Email: UIC.Regulations@conservation.ca.gov

The backup contact person for these inquiries is:

Jan Perez
Department of Conservation
801 K Street, MS 24-02
Sacramento, CA 95814

Phone: (916) 322-3080

Email: UIC.Regulations@conservation.ca.gov

Please direct requests for copies of the text (i.e., the "express terms") of the proposed regulations, the initial statement of reasons, the modified text of the proposed regulations (if any), or other information upon which this rulemaking is based to Tim Shular at the above address.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 9 of 10

# **AVAILABILITY OF CHANGED OR MODIFIED TEXT**

After the written comment period and any hearing that may be conducted by the Department receive comments regarding the proposed regulations, the Department will consider all timely and relevant comments received. Thereafter, the Department may adopt the proposed regulations in substantially the same form as described in this notice.

If the Department makes any modifications to the text of the proposed regulations that are substantial but still sufficiently related to the original proposed text as described in this notice, the Department will make the modified text (with changes clearly indicated) available to the public for at least 15 days before adopting the proposed regulations as modified. The Department will accept written comments regarding modified regulations for 15 days after the date upon which they are made available to the public. Please send requests for copies of any modified regulations to the attention of Tim Shular at the address indicated above.

# **AVAILABILITY OF THE FINAL STATEMENT OF REASONS**

Upon its completion, copies of the Final Statement of Reasons may be obtained by contacting Tim Shular at the above address.

# **AVAILABILITY OF DOCUMENTS ON THE INTERNET**

Copies of the Notice of Proposed Action, the Initial Statement of Reasons, and the text of the regulations in underline and strikeout can be accessed through our website at: <a href="http://www.conservation.ca.gov">http://www.conservation.ca.gov</a>.

If you have any questions regarding the process of the proposed action, please contact Tim Shular, Office of Governmental and Environmental Relations at (916) 322-3080, or by email at UIC.Regulations@conservation.ca.gov.

Aquifer Exemption Compliance Schedule Regulations Notice of Proposed Rulemaking Action Page 10 of 10